

Abstract

It is intended to provide a peptide chemically modified with PEG which contains a sequence consisting of 18 amino acids and having a specific structure made up of four planes, i.e., two hydrophobic planes and two hydrophilic planes alternately arranged in an alpha-helix structural model; a complex of the above peptide with a peptide-binding substance; a carrier modified with the peptide chemically modified with PEG as described above; a process for producing the same; and a method of delivering a substance bonded to a carrier modified with the peptide chemically modified with PEG or enclosed therein. The peptide chemically modified with PEG as described above has a high safety and can be easily formulated into a complex with a peptide-binding substance (i.e., having favorable handling properties). The resultant complex has a high solubility and shows an excellent introduction selectivity of the peptide-binding substance into cells. Thus, it is available as a vector achieving a high introduction efficiency without lowering the specific activity by the chemical modification with PEG.